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(54) Title: **ULTRASOUND CONTRAST AGENTS AND PROCESS FOR THE PREPARATION THEREOF**

(57) Abstract: Method for preparing a lyophilized matrix and, upon reconstitution of the same, a respective injectable contrast agent comprising a liquid aqueous suspension of gas-filled microbubbles stabilized predominantly by a phospholipid. The method comprises preparing an emulsion from an aqueous medium, a phospholipid and a water immiscible organic solvent. The emulsion is then freeze-dried and subsequently reconstituted in an aqueous suspension of gas-filled microbubbles. The method allows to obtain suspensions comprising microbubbles having a relatively small diameter and a narrow size distribution.



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